The following claims are presented for examination:

1.   **(Presently Amended)** An apparatus comprising:

a needle;

a catheter, wherein said catheter receives said needle; and

a sensor, wherein said sensor senses an angular orientation of ~~at least one of:~~

~~(i) a feature of said needle; and~~

~~(ii) a feature of said catheter,~~

a feature relative to an axis aligned with a length of said needle**,** ~~or said catheter~~ **wherein said feature is disposed on at least one of said needle or said catheter**.

2.   **(Original)** The apparatus of claim 1 wherein said feature comprises a bevel.

3.   **(Original)** The apparatus of claim 1 wherein said sensor resolves orientation of said feature in at least one direction.

4.   **(Previously Presented)** The apparatus of claim 1 further comprising:

pseudo skin, wherein said pseudo skin has an upper surface and a lower surface, and wherein said needle and catheter are disposed above said upper surface of said pseudo skin; and

a receiver for receiving at least one of said needle and said catheter, wherein said receiver is disposed underneath said lower surface of said pseudo skin.

5.   **(Original)** The apparatus of claim 1 wherein said sensor is physically coupled to said needle.

6.   **(Original)** The apparatus of claim 2 wherein said catheter comprises said bevel.

7.   **(Previously Presented)** The apparatus of claim 2 further comprising a data processing system receives a signal that is indicative of said orientation of said bevel.

8.   **(Previously Presented)** The apparatus of claim 4 further comprising a housing, wherein said receiver is disposed within said housing, and wherein said pseudo skin is substantially co-planar with a surface of said housing.

9.   (Previously Presented) The apparatus of claim 8 wherein said pseudo skin comprises an opening, and wherein, to simulate a vascular access procedure, at least one of said needle and said catheter is inserted through said opening and removably coupled to said receiver.

10.   (Previously Presented) The apparatus of claim 1 further comprising:
pseudo skin;
a force-feedback assembly, wherein at least one of said needle and said catheter detachably couples to said force-feedback assembly.

11.   (Original) The apparatus of claim 1 further comprising pseudo skin, wherein said needle and said catheter are inserted through said skin to simulate a vascular access procedure.

12.   (Previously Presented) An apparatus comprising:
pseudo skin;
a force-feedback assembly, wherein said force-feedback assembly is disposed beneath said pseudo skin; and
an end effector, wherein said end effector passes through said pseudo skin to reversibly couple to said force-feedback assembly.

13.   (Original) The apparatus of claim 12 wherein said end effector comprises a needle.

14.   (Original) The apparatus of claim 12 wherein said end effector comprises a catheter.

15.   (Original) The apparatus of claim 12 further comprising a data processing system, wherein said force-feedback assembly receives a control signal from said data processing system.

16.   (Original) The apparatus of claim 15 wherein signals that are indicative of a position of said end effector are transmitted to said data processing system.

17.   (Previously Presented) The apparatus of claim 12 further comprising a housing, wherein said force-feedback assembly is disposed within said housing and wherein said pseudo skin is substantially co-extensive with a surface of the housing.

18.   (Original) The apparatus of claim 12 wherein said end effector comprises a needle-catheter module, wherein said needle-catheter module includes:

> a needle;
>
> a catheter, wherein said catheter receives said needle, and wherein an end of at least one of said needle or said catheter comprises a bevel; and
>
> a sensor, wherein said sensor senses an orientation of said bevel.

19.   (Original) The apparatus of claim 18 further comprising a data processing system, wherein said data processing system receives a signal that is indicative of said orientation of said bevel.

20.   (Previously Presented) An apparatus comprising:

> an end effector;
>
> a housing, wherein said housing has an opening;
>
> pseudo skin, wherein said pseudo skin covers said opening in said housing; and
>
> a receiver for receiving said end effector, wherein said receiver is disposed in said housing.

21.   (Original) The apparatus of claim 20 further comprising a housing, wherein said receiver is disposed within said housing, and wherein said pseudo skin is substantially co-planar with a surface of said housing.

22.   (Original) The apparatus of claim 20 wherein said pseudo skin comprises an opening, and wherein, to simulate a vascular access procedure, said end effector is inserted through said opening and removably coupled to said receiver.

23.   (Original) The apparatus of claim 20 wherein said receiver has at least one rotational degree of freedom and at least one translation degree of freedom.

24. **(Original)** The apparatus of claim 20 wherein said end effector comprises a catheter.

25. **(Original)** The apparatus of claim 20 wherein said end effector comprises a needle.

26. **(Original)** The apparatus of claim 20 wherein said end effector comprises a sensor.

27. **(Original)** The apparatus of claim 26 wherein said sensor senses an orientation of said end effector.

28. **(Original)** The apparatus of claim 27 further comprising a data processing system, wherein said data processing system receives a signal that is indicative of said orientation of said end effector.